

to the similar plateau basalt areas of the Deccan, Thulean, Oregonian, Palisadan, and Siberian regions.⁹

In this preliminary sketch of the relation of various comagmatic regions to the main features of the Atlantic area, especially as regards the Wegener hypothesis, it seems to be scarcely necessary to discuss the relations in other parts of the earth (Lemuria, for example) mentioned by Wegener in the course of his discussions. Mention may be made, however, of a minor point in Wegener's argument.¹⁰ This is that he believes that the Pacific volcanic islands are "fragments of the lithosphere and that they are in so many cases so completely covered with lava that the lithospheric core is not visible." Were this true the upper side of the basal fragment of the lithosphere should be not far below or at the surface of the ocean and we would expect to find, as we do at many other volcanoes, fragments of granite, gneiss, or other basement rocks as inclusions in the lavas.

In the course of a recent study of the lavas of the Hawaiian islands a very large number of specimens have been examined but not a single inclusion of such igneous or metamorphic rocks, or of limestones or sandstones, has been found. The only xenoliths that the Hawaiian lavas contain are of dunite, lherzolite, pyroxenite, or gabbro—all evidently cognate inclusions (enclaves homoeogènes of Lacroix) produced by magmatic segregation in the basalts. Lacroix¹¹ has recently shown that the supposed granite of Bora-Bora in the Society Islands is a medium-grained olivine gabbro, either intrusive into the abundant basalts of the island or (as seems to me to be more probable) a cognate inclusion like those of the Hawaiian Islands. A somewhat extensive search through the literature on the petrography of the volcanic islands of the Pacific has not revealed any example of inclusions of granitic or other continental rocks. Wegener's suggestion may therefore be regarded as unsupported by evidence.

ZOOLOGY.—*Gonorhynchus moseleyi*, a new species of herring-like fish from Honolulu. DAVID STARR JORDAN AND JOHN OTTERBEIN SNYDER.

***Gonorhynchus moseleyi* Jordan and Snyder, new species**

Description of the type, No. 23239, Stanford University collection, a specimen 140 millimeters long from Honolulu, T. H., collected by Edwin Lincoln Moseley, professor of Biology in the State Normal School at Bowling Green, Ohio.

⁹ H. S. Washington, *Deccan traps and other plateau basalts*, Bull. Geol. Soc. Amer. 33: 765. 1922.

¹⁰ A. Wegener, *Die Entstehung der Kontinente und Ozeane*, 2 ed., 1920, p. 42, note 1.

¹¹ Lacroix, *Le soi-disant granite (gabbro à olivine) de l'île Bora-Bora*, C. R. Soc. Géol. France, 1916, p. 178.

Head 4.1 in length to base of caudal; depth 9.2; depth caudal peduncle 4.5 in head; depth head 2.6; length snout 2.5; diameter eye 4; width interorbital space 3.7; length pectoral fin 1.3; ventral fin 2.2; height dorsal 2.1; anal 2.4; length caudal 1.8; scales lateral series to base of caudal 166; vertical series between lateral line and middle of back 22; pectoral rays 11; dorsal 9; ventral 9; anal 7.

Length of barbel equal to diameter of pupil, extending when depressed over half way between its base and border of lower lip. Upper lip with many rows of tubercles, the edge fringed with papillae. Lower lip covered with small tubercles and with pendent lobes which extend posteriorly.

Gillrakers long and slender 17 plus 19 on the first arch.

Head and body almost completely sealed, the scales extending over throat to edge of lip, under part of snout, and along the rays of all the fins. Tip of snout, lips, and opercular membrane naked. The scales are long and slender with 9 spines on the exposed ends.

Pectoral and ventral fins with pointed axillary flaps over half as long as the fins; the outer surfaces of which are covered with scales. Pectoral fins pointed, appearing acute when depressed, ventrals rounded, edge of dorsal convex on the anterior, concave on the posterior half, caudal notched.

Color in spirits gray above, lighter below, the dark color resulting from numerous closely opposed black specks. Pectoral fins largely black, bordered by white; dorsal and caudal broadly edged with black, ventrals black, edged with white, the dark area appearing as a well defined black oval spot when the fin is not spread; anal immaculate. Lining of gill chamber black, the color showing through the translucent opercle. The bases of pectorals and ventrals were bright yellow when the specimen was fresh.

This dainty little fish was found by Moseley in the market of Honolulu, where he made a valuable and interesting collection of fishes.

It is closely related to the two known species of the genus, *Gonorhynchus gonorhynchus* (Gmelin) from the Indian-Australian region and *Gonorhynchus abbreviatus* Schlegel from Japan.

The Hawaiian species differs from both these in having a much larger eye and a longer head. The color of the ventral fins differs also, those of *G. moseleyi* having a large sharply defined central oval black blotch, not covering the posterior part of the fin as in the others.

Comparisons follow with *Gonorhynchus gonorhynchus* from Port Jackson and Lord Howe Islands and *G. abbreviatus* from Yokohama.

	HAWAII (<i>G. moseleyi</i>)	LORD HOWE ISLAND <i>G. gonorhynchus</i>		PORT JACKSON <i>G. gonorhynchus</i>	YOKOHAMA <i>G. abbreviatus</i>
Length to base of caudal in millimeters	124	122	89	217	250
Depth body in hundredths of length	0.11	0.11	0.10	0.115	0.125
Depth caudal peduncle	0.058	0.05	0.05	0.058	0.056
Length head	0.26	0.245	0.24	0.21	0.22
Length snout	0.10	0.095	0.098	0.08	0.095
Diameter eye	0.065	0.05	0.05	0.045	0.05
Width interorbital area (skull)	0.035	0.025	0.023	0.03	0.035
Dorsal rays	9	10	10	11	8
Anal rays	7	7	7	7	6
Pectoral rays	11	10	9	10	11
Ventral rays	9	9	9	9	8

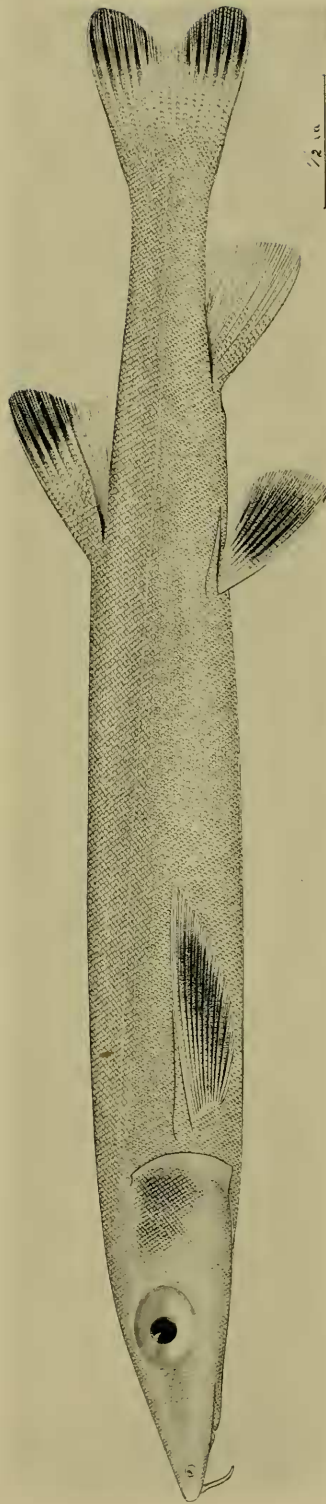


Fig. 1. *Gonorhynchus moseleyi* Jordan and Snyder

There appear to be no differences in the number of the scales. With age, the scales seem to grow laterally, the spinules increasing in number to 19 or more.

BOTANY.—*Ten new species of trees from Salvador.*¹ PAUL C. STANDLEY, U. S. National Museum.

The ten species of trees here described all occur in the Republic of Salvador, but some of them extend also to other parts of Central America. Part are based upon specimens obtained by the writer during the winter of 1921–22, and others upon material collected by Dr. Salvador Calderón of the Salvadorean Department of Agriculture. One of the three described is of some importance locally as a source of lumber, while another represents a genus not reported previously from North America.

Pseudolmedia mollis Standl., sp. nov.

Large tree, the young branchlets densely fulvous-pilose; petioles very thick, 4 to 6 mm. long; leaf blades oblong or narrowly ovate-oblong, 11 to 16 cm. long, 4 to 6.5 cm. wide, somewhat abruptly acuminate, obliquely rounded at base, subcoriaceous, glabrate above except along the nerves, the venation depressed, beneath paler, copiously soft-pilose, especially along the costa and lateral nerves, the venation elevated, the lateral nerves about 15 pairs, arcuately ascending, anastomosing near the margin; fruit globose-oval, 2 cm. long, densely soft-pilose, subtended at base by few broadly ovate, acutish bracts.

Type in the U. S. National Herbarium, no. 1,152,341, collected at Comasagua, Salvador, December, 1922, by Dr. Salvador Calderón (no. 1382).

The leaves resemble in shape and texture those of *P. oxyphyllaria* Donn. Smith, the only other species of the genus known to occur in Central America, but the pubescence is altogether different in the two species. The vernacular name of the Salvadorean tree is "tepeujushte."

Ledenbergia macrantha Standl., sp. nov.

Tree, about 6 m. high, with long, somewhat pendent branches; young branchlets sparsely tomentulose, soon glabrate; petioles slender, 2 to 4.5 cm. long, sparsely villosulous; leaf blades elliptic or broadly ovate, 4.5 to 8 cm. long, 2.5 to 4.5 cm. wide, acuminate, acute or obtuse at base, thin, glabrous above, beneath villosulous along the costa near the base, elsewhere glabrous racemes very numerous and forming a dense panicle, their rachises 12 to 20 cm. long, tomentulose; pedicels filiform, 5 to 10 mm. long; sepals oblong-oblancoate, in fruit 8 to 13 mm. long, 3 to 4.5 mm. wide, glabrate, conspicuously veined; fruit glabrate, rugulose, 3 mm. long.

Type in the U. S. National Herbarium, no. 1,111,202, collected along roadside at Puerta de la Laguna, near San Salvador, Salvador, February 24, 1923, by Dr. Salvador Calderón (no. 680). The following additional specimens have been seen:

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